

J-V

V02

L3580 E/34 ★ SU -877-627

ND/ ★ de-band HF differential transformer - has two core line input
upled to first and third conductor section ends

LONDON S E 11.02.80-SU-881218

(05.11.81) H01f-19/04

02.80 as 881218 (537AR)

ide-band differential transformer with the non-symmetrical
put consisting of the two core line and four sector conductor has
the line connected to the first and third conductor sectors. The
nd conductor in the first multicore line and the
beginning of the second conductor in the second multicore line
re connected to the common bus. Coaxial lines operate in the de-
coupling mode, equalising the effects of non-symmetrical loads.
Wave impedance in the two line arrangement should be double
the wave impedance of any coaxial line of the same length.
Bul.40/30.10.81 (3pp)

V2-F2

LEPO/ ★ V02

L3581 E/34 ★ SU -877-628

Wideband high frequency transformer - has parallel line sectors
forming symmetrical and non-symmetrical inputs to reduce
coaxial line power loss

LENGD POLY 18.02.80-SU-883621

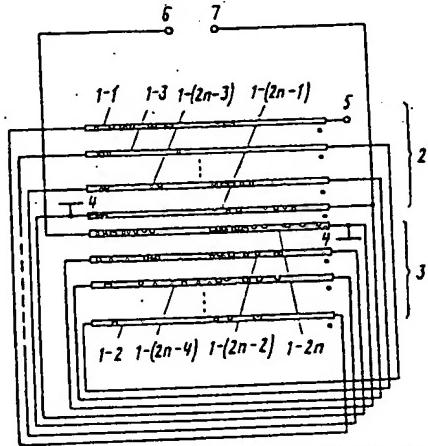
(05.11.81) H01f-19/04

18.02.80 as 883621 (537MC)

Wideband h.f. transformer used in radio technology has 2n
conductor sector in parallel with (2n-1) sections to increase
symmetrical and non-symmetrical loads supply efficiency with
fewer constructional elements.

The start or the 2n section line and the end of the (2n-1) line are
connected to the common bus (4). The first sections' starts offset
the non-symmetrical output (5) w.r.t. bus (4). The end of the (1-2n)
section and the start of the 1-(2n-1) sections form the symmetrical
input (6,7). With two sections only the wave impedance between
the first and the third sections is twice that between the second
and fourth sector. Arrangement reduces total losses in the
windings and the coaxial lines. Bul.40/30.10.81 (3ppDwg.No.1/2)

V2-F2



IODA/ ★ V02

L3583 E/34 ★ SU -877-630

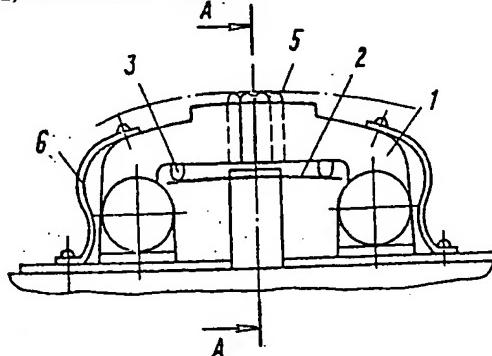
Current pick-up unit - has L-shaped radiators with contact
surfaces having sinusoidal profile and supported on flat springs

IODA K S 22.02.80-SU-884742

(05.11.81) H01f-21/02

22.02.80 as 884742 (907WB)

The current pick-up is used in inductance coils and has increased
loading capacity and improved reliability by using L-shaped
radiators (1) with surfaces (5) in contact with the coil turns and
having a wave profile. The radiators are supported by flat
springs (2) set on insulating supports (3), and are connected to the



body by flexible current conducting elements (6). Current flows
from the coil via contacts, radiators and conductors (8). The L-
shape and sinusoidal surfaces of the radiators enable the working
capacity to be maintained for deviations from the coil pitch
exceeding half the width of a turn. Bul.40/30.10.81
(2ppDwg.No.1/3)

V2-F1

KARD/ ★ V02

L3584 E/34 ★ SU -877-631

Transformer with regulated magnetic permeability core - uses
closed O-shaped cores coupled to C-shaped low permeability core

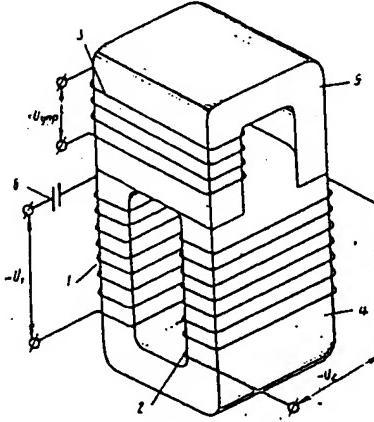
KARDAKOV L V 29.02.80-SU-888391

(05.11.81) H01f-21/08 H01f-29/14

29.02.80 as 888391 (537AR)

Saturated core transformer for stabilised electronic appts.
supplies uses closed O-shaped core coupled to C-shaped core to
improve the active material utilisation. Transformer contains
primary (1) and sec. (2) AC windings and the DC control winding
(3) arranged on two orthogonal connected cores (4,5). C-shaped
(3) is made from low magnetic permeability material. D.C.
core (5) is made from high magnetic permeability material. D.C.
in the control winding (3) changes the magnetic permeability of
the core, regulating the transformer output voltage
proportionately. A permeability change also changes the current
density and the voltage drop across the capacitor (8) and the
prim. Variable magnetic flux does not affect the control winding
core and so no variable EMF is generated. Bul.4B/30.10.81
(6ppDwg.No.2/7)

V2-G2A



ZADE/ ★ V02

L3585 E/34 ★ SU -877-632

Saturable core transformer - has magnetically coupled E-shaped
and C/shaped cores to change transformer inductance with
control current

ZADEREIG P 29.02.80-SU-889402

(05.11.81) H01f-21/08 H01f-29/14

29.02.80 as 889402 (537MC)

Saturating transformer core is formed by two E- and C-shaped
cores to improve active materials utilisation. Two-section
primary winding is arranged on the side arms of the E-shaped
core and connected to form a T network and a d.c. control
winding is arranged on the C-shaped core. The E-shaped core can
be laminated or formed by two C sections and cores are fixed at
right angles.

Magnetic flux induced by the primary windings passes through
two separate paths with 90 deg. phase shift which allows a.c./d.c.
conversion applications. The d.c. control current passes through
both sections, allowing effective control irrespective of control
signal polarity. Bul.40/30.10.81 (5pp)

V2-G2A

SAVC/ ★ V02

L3586 E/34 ★ SU -877-633

Transformer with linear lead/out - has region free from turns
surrounding lead/out to reduce distortions in electric and
magnetic fields

SAVCHENKO A I 25.02.80-SU-886368

X12 (05.11.81) H01f-27/28

25.02.80 as 886368 (907WD)

The transformer uses less material and requires less work to
construct, and reduces electric losses by placing the turns of the
external winding w.r.t. the end of the winding, so that the area of
the linear lead-out of the internal winding is free from turns.

The transformer has a framework with a rod carrying the low
voltage winding, hv winding. A linear lead-out is taken from the
centre of the axis of this winding and passes through the region
free from turns inside the regulating winding. Between the turns
on the regulating winding are channels. The region free from
turns limits distortions on the electric and magnetic fields, and